Contents

VOLUME 4, ISSUE Nos. 1–4

Yeast

ISSUE No. 1 MARCH 1988

The Methylotrophic Yeasts
M. A. Gleeson and P. E. Sudbery 1

Proteases and the Processing of Precursors to Secreted Proteins in Yeast
H. Bussey 17

The 2 μm Circle Plasmid of *Saccharomyces cerevisiae*
A. B. Futcher 27

Purification of Isocitrate Lyase from *Saccharomyces cerevisiae*
Y. S. Lopez-Boado, P. Herrero, M.-T. Fernandez, R. Fernandez and F. Moreno 41

Expression of env Sequences of the Bovine Leukemia Virus (BLV) in the Yeast *Saccharomyces cerevisiae*
S. Brantl, M. A. Eldarov, H. Rößler, B. Drescher, H. Lang, S. Rosenthal and K. G. Skryabin 47

Changes in Ribosomal Properties During Adenylate Deprivation in the Cells of *Kluyveromyces lactis*
J. Ishiguro, Y. Azuma, M. Uritani and M. Miyazaki 61

A Nuclear Gene Required for the Expression of the Linear DNA-Associated Killer System in the Yeast *Kluyveromyces lactis*
M. Wesolowski-Louvel, C. Tanguy-Rougeau and H. Fukuhara 71

Calendar 83

ISSUE No. 2 JUNE 1988

Physiological and Biochemical Analysis of Cytochrome P-450 in the Yeast *Schizosaccharomyces pombe*
H. F. J. Bligh and S. L. Kelly 85

Pleiotropic Mutations in *Saccharomyces cerevisiae* Affecting Sterol Uptake and Metabolism
T. L. Lewis, G. A. Keesler, G. P. Fenner and L. W. Parks 93

Yeast Flocculation: Quantification
M. Stratford and M. H. J. Keenan 107

Properties of Enzymes which Reduce Dihydroxyacetone and Related Compounds in *Hansenula polymorpha* CBS 4732
C. Verduyn, G. J. Breedveld, H. Schreuder, W. A. Scheffers and J. P. van Dijken 117

Purification and Properties of Dihydroxyacetone Reductase and 2,3-Butanediol Dehydrogenase from *Candida utilis* CBS 621
C. Verduyn, G. J. Breedveld, W. A. Scheffers and J. P. van Dijken 127

Metabolism of 2,3-Butanediol in Yeasts
C. Verduyn, G. J. Breedveld, W. A. Scheffers and J. P. van Dijken 135

Substrate Specificity of Alcohol Dehydrogenase from the Yeasts *Hansenula polymorpha* CBS 4732 and *Candida utilis* CBS 261
C. Verduyn, G. J. Breedveld, W. A. Scheffers and J. P. van Dijken 143

The Subcellular Location of 4-Aminobutyrate Aminotransferase in *Candida boidinii* and its Probable Role in the Breakdown of Putrescine and Spermidine
P. J. Large and A. Robertson 149

Book Review 155

Calendar 156

Announcements 156

ISSUE No. 3 SEPTEMBER 1988

The ψ Factor of Yeast: a Problem in Inheritance
B. S. Cox, M. F. Tuite and C. S. McLaughlin 159

Possible Gene Interchange Between Plasmid and Chromosome in Yeast
I. Utatsu, T. Imura and A. Toh-e 179

Karyotyping of Yeast Strains of Several Genera by Field Inversion Gel Electrophoresis
J. R. Johnston, C. R. Contopoulou and R. K. Mortimer 191

Yeast Flocculation: A Dynamic Equilibrium
M. Stratford, H. P. Coleman and M. H. J. Keenan 199

A Non-conserved Sequence in the 5′ Region of the *CYH2* Intron from *Saccharomyces cerevisiae* Controls Splicing Efficiency of the Pre-mRNA
U. Swida, E. Thüroff, E. Steinert and N. F. Käufer 209

Polyploid Fragile Strains of *Saccharomyces cerevisiae* – a Novel Source of Proteins for Nutritional Purposes
L. I. Stateva, P. V. Venkov, A. A. Hadjiolov, L. A. Koleva and N. L. Lyudskahov 219

Substrate Specificity of the Phosphorylated Fructose-1,6-Bisphosphatase Dephosphorylating Protein Phosphatase from *Saccharomyces cerevisiae*
A. Manhart and H. Holzer 227

Indian Yeast Group Activities
S. C. Basappa 233

XII International Specialized Symposium on Yeast 'Genetics of Non-conventional Yeasts'
H. Weber 235

ISSUE No. 4 DECEMBER 1988

Membrane Transport in an Osmotically Fragile Mutant of *Saccharomyces cerevisiae*
A. Kotyk, P. Venkov and M. Dvořáková 241

The Influence of Oxygen and Organic Hydrogen Acceptors on Glycolytic Carbon Dioxide Production in *Brettanomyces anomalus*
D. M. Gaunt, H. Degn and D. Lloyd 249

Genetic Control of Chromosome Stability in the Yeast *Saccharomyces cerevisiae*
N. Yu. Kouprina, O. B. Pashini, N. T. Nikolaishwili, A. M. Tsouladze and V. L. Larionov 257

Structure and Expression of Yeast *DPR1*, a Gene Essential for the Processing and Intracellular Localization of *ras* Proteins
L. E. Goodman, C. M. Perou, A. Fujiyama and F. Tamanoi 271

Metabolic Responses of *Saccharomyces cerevisiae* CBS 8066 and *Candida utilis* CBS 621 upon Transition from Glucose Limitation to Glucose Excess
H. Van Urk, P. R. Mak, W. A. Scheffers and J. P. Van Dijken 283

Genetic Analysis in the Methylotrophic Yeast *Hansenula polymorpha*
M. A. Gleeson and P. E. Sudbery 293

Volume Contents, Volume 4 iii

Author Index, Volume 4 vii

Keyword Index, Volume 4 viii

Erratum ix

Author Index, Volume 4

Azuma, Y., 61

Basappa, S. C., 233
Bligh, H. F. J., 85
Brantl, S., 47
Breedveld, G. J., 117, 127, 135, 143
Bussey, H., 17

Coleman, H. P., 199
Contopoulou, C. R., 191
Cox, B. S., 159

Degn, H., 249
Drescher, B., 47
Dvořáková, M., 241

Eldarov, M. A., 47

Fenner, G. P., 93
Fernandez, M.-T., 41
Fernandez, R., 41
Fujiyama, A., 271
Fukuhara, H., 71
Futcher, A. B., 27

Gaunt, D. M., 249
Gleeson, M. A., 1, 293
Goodman, L. E ., 271

Hadjiolov, A. A., 219
Herrero, P., 41
Holzer, H., 227

Imura, T., 179
Ishiguro, J., 61

Johnston, J. R., 191

Käufer, N. F., 209
Keenan, M. H. J., 107, 199
Keesler, G. A., 93
Kelly, S. L., 85
Koleva, L. A., 219
Kotyk, A., 241
Kouprina, N. Yu., 257

Lang, H., 47
Large, P. J., 149
Larionov, V. L., 257
Lewis, T. L., 93
Lloyd, D., 249
Lopez-Boado, Y. S., 41
Lyudskahov, N. L., 219

Mak, P. R., 283
Manhart, A., 227
McLaughlin, C. S., 159
Miyazaki, M., 61
Moreno, F., 41
Mortimer, R. K., 191

Nikolaishwili, N. T., 257

Parks, L. W., 93
Pashini, O. B., 257
Perou, C. M., 271

Robertson, A., 149
Rosenthal, S., 47
Rößler, H., 47

Scheffers, W. A., 117, 127, 135, 143, 283
Schreuder, H., 117
Skryabin, K. G., 47
Stateva, L. I., 219
Steinert, E., 209
Stratford, M., 107, 199
Sudbery, P. E., 1, 293
Swida, U., 209

Tamanoi, F., 271
Tanguy-Rougeau, C., 71
Thüroff, E., 209
Toh-e, A., 179
Tsouladze, A. M., 257
Tuite, M. F., 159

Uritani, M., 61
Utatsu, I., 179

Van Dijken, J. P., 117, 127, 135, 143, 283
Van Urk, H., 283
Venkov, P. V. 219
Venkov, P., 241
Verduyn, C., 117, 127, 135, 143

Weber, H., 235
Wesolowaski-Louvel, M., 71

Key Word Index, Volume 4

Acetoin, 117
Acetol, 117
Acetone, 117
Agitation, 199
Alcohol dehydrogenase, 143
4-aminobutyrate, 149
Aminotransferase, 149

Bovine leukemia virus, 47
Brettanomyces, 249
2,3-butanediol, 117, 135
Butanediol dehydrogenase, 135
2,3-butanediol dehydrogenase, 127

Candida, 149, 283
Catabolite inactivation, 41
Cell division, 257
Chromosomes, 257
Crabtree effect, 23
C-terminal modification, 271
Custers effect, 249
Cyt. P450, 85
Cytosol, 149

Dehydrogenase, 117
Diacetyl, 117
Dihydroxyacetone, 117
Dihydroxyacetone reductase, 127, 135
DNA sequence, 271

Equilibrium, 199

Fermentation, 283
FIGE, 191
Flocculation, 199
Fragile mutant, 241
Fragile mutants, 219
Fructose-1,6-biophosphatase, 227

Gene cloning, 71
Genetic analysis, 293
Genetic homology, 191
Glycerol, 117
Glycolysis, 249

H^+ extrusion, 241
Hansenula polymorpha, 293

Intron, 209
Isocitrate lyase, 41

Karyotyping, 191
Killer DNA plasmid, 71
Kluyveromyces, 61
Kluyveromyces lactis, 71

Lysis, 219

Mannose, 199
Mass spectrometry, 249
Membrane localization, 271
Membrane transport, 241
Methanol mutant, 293
Methylglyoxal, 117
Methylotrophic yeast, 293
Mitosis, 257
Mutations, 93

Non-conserved sequence, 209

Organic hydrogen acceptors, 249

Palmitoylation, 271
PGK, 47
pH value, 199
PHO5, 47
Plasmid evolution, 179
Polyploids, 219
1,2-propanediol, 117
Protein extracts, 219
Purification, 41
Putrescine, 149

Ras related, 271
Reductase, 117
Respiration, 283
Ribosomes, 61
RNA-splicing, 209

Saccharomyces, 93, 283
Saccharomyces cerevisiae, 41, 47, 219, 227, 241, 257
Schizosaccharomyces pombe, 85
Sequence homology, 179
Single-cell proteins, 219
Specificity of phosphatases, 227
Spermidine, 149
Splicing efficiency, 209
Spontaneous acidification, 241
srb1, 219
Sterol, 93

Transaminase, 149
Tumour virus, 47

Uptake, 93

Viral antigens, 47

Yeast, 61, 93, 199, 209, 257
Yeasts, 117
Yeast genera, 191
Yeast plasmids, 179

Zygosaccharomyces, 179